

Work Order ID 79320

\*79320\*

Page 1

January-24-12 3:57:28 PM

Item ID: D206-642-541 Accept \*N900040100\* Setup Start \*NS1\*

Revision ID: Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00 \*1\*

Required Date: 02/02/2012 Req'd Qty: 1.00 \*1\*

Reference: Cust Item ID:

Customer:

Approvals: Process Plan: M.C.J. Date: 12/01/24 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3274	D								

100

0.00

\*100\*

DOCUMENT CONTROL

DC


Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

N/A 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 79320****\*79320\***

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Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

**\*110\***

Skidtubes

0.00

Skidtubes

Memo

Skidtubes

\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

- DC 12/02/22

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

BB/20 12-01-26

3- weld fwd cap as per dwg D3274 and OS1004

AR Aluminum Rod Batch: m120104

3 BE 12/02/29

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.

Drill 3/16" pilot holes as per Dwg D3274

BB 12/02/29

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

W/O:		WORK ORDER CHANGES					
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Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
114	QC5- Inspect part completeness to step on W/O	0.00							
<b>*114*</b>									
QC	Memo	0.00							
Quality Control									
116	QC10- Inspect visual per QSI004- ground welds	0.00							
<b>*116*</b>									
QC	Memo	0.00							
Quality Control									
120	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*120*</b>									
HandFinish	Memo	0.00							
Hand Finishing									

**DB/HG 12-3-1**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

# Work Order ID 79320

**\*79320\***

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January-24-12 3:57:28 PM

Item ID: D206-642-541

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**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC3- Inspect Part Finish

0.00

**\*130\***

QC

Memo

0.00

Quality Control

(1)

SAD 12-03-02

150

0.00

**\*150\***

Skidtubes

Skidtubes

Memo

0.00

1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274

2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

3-Bond web in place as per Dwg D3274 & QSI 015.

A/R Sikaflex-291 M119599

Sikaflex expire date: 2012-08-13

Start: 3:00 Time: 2012-02-02

Finish: 12/03/12 Time: 6:30

(Adhere for 12 hours)

12/03/02

SAD 12-03-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Item ID: D206-642-541

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**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item-ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Run Start

**\*NR1\***

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

**\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00

**\*160\***

QC

Memo

0.00

Quality Control

*DP*

*12-3-5*

170

Skidtubes

0.00

**\*170\***

Skidtubes

Memo

0.00

Skidtubes

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297" . Deburr

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBE  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

*SAD*

*12-03-05*

*SAD*

*12-03-12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Work Order ID 79320

**\*79320\***

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January-24-12 3:57:28 PM

Item ID: D206-642-541 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube  
 Start Date: 24/01/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 02/02/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 <b>*180*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 4.40 2.93.17 0.00				1	0	BE 12/03/12	
190 <b>*190*</b> Skidtubes Skidtubes	Skidtubes  Memo 1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod A/RAluminum Rod <u>11/20/164</u> 3-Grind cross bolt welds flush as per Dwg D3274. 4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.	0.00 0.00							

**DD 123-15**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

**Work Order ID 79320****\*79320\***

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Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	QC5- Inspect part completeness to step on W/O	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									
210	QC10- Inspect visual per QSI004- ground welds	0.00							
<b>*210*</b>									
QC	Memo	0.00							
Quality Control									
220	Pressure Wash per QSI005 4.3	0.00							
<b>*220*</b>									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch								

IXP M-12/03/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 79320

\*79320\*

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January-24-12 3:57:28 PM

Item ID: D206-642-541 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Replacement Skidtube  
 Start Date: 24/01/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 02/02/2012 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
*230*									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 11:05 300 OVEN TEMPERATURE: FINISH TIME: 11:53								

240	QC3- Inspect Part Finish	0.00							
*240*									
QC	Memo	0.00							
Quality Control									

250	HandFinishing	0.00							
*250*									
HandFinish	Memo	0.00							
Hand Finishing	1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets. A/RN/ALPS-3 2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/R Sikaflex-291 Sikaflex expire date:								

M114596  
 M119999  
 12/08

1X Ø M-12/03/20

1X Ø M-12/03/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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# Work Order ID 79320

**\*79320\***

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January-24-12 3:57:28 PM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260

QC5- Inspect part completeness to step on W/O

0.00

**\*260\***

QC

Memo

0.00

Quality Control

Inspect Nut Plate & Inserts

1 BL 12-3-20.

270

HAND FINISHING RESOURCE #1

0.00

**\*270\***

HandFinish

Memo

0.00

Hand Finishing

1-Install wearpads & gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274

A/RSikaflex-291

Sikaflex expire date:

M119999

12/08

3-Inspect for foreign objects as per QSI 024

4-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3

Batch:

N/A

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/RSikaflex-291

Sikaflex expire date:

M119999

12/08

1X Ø m/L 12/03/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/01/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 02/02/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Run Start

**\*NR1\***

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

**\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

280

QC5- Inspect part completeness to step on W/O

0.00

**\*280\***

QC

Memo

0.00

Quality Control

1 BL 12-3-21

290

Identify as per dwg & Stock Location:

0.00

**\*290\***

Packaging

Memo

0.00

Packaging

PPP 74688

1x SP 12-03-21

300

QC21- Final Inspection - Work Order Release

0.00

**\*300\***

QC

Memo

0.00

Quality Control

12/3/22

MF 12-03-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

## Comments:

IPP Rev:B05.09.23 Revised per D206-642 Rev. JKJ/JLM  
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC  
 IPP Rev:F 08-06-02 add comment DD verified by:EC  
 IPP Rev:G 08-10-09 revise details DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-1-190		Manufactured	No			110	Each	135.0000	1	1			
*D2600-1-190*													
Extrusion Round 3" 206													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				HALL				53					
				69622				53					
				LG				82					
				76912				82					
D3285-1		Manufactured	No			110	Each	68.0000	1	1			
*D3285-1*													
Cap													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG002				68					
				52511				21					
				52647				47					
D3282-041		Manufactured	No			150	Each	17.0000	1	1			
*D3282-041*													
Float Web (206L/407)													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				17					
				74294				7					
				77498				10					

\*\*

OK 12/02/22

\*\*

BE 12/02/22

\*\*

SAD 12-03-02

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January-24-12 3:57:31 PM

Work Order ID: 79320

**\*79320\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

190

Each

559.0000

12

12

**\*D2649\***

Cross Bolt Spacer

**\*\***

*BE 12/03/12*  
*B79565 \*12*

Location

Loc Qty

Loc Code

LG

40

77574

40

LG001

519

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

78020

400

D3275-1

Manufactured No

190

Each

276.0000

12

12

**\*D3275-1\***

Crossbolt Spacer

**\*\***

*BE 12/03/12*

Location

Loc Qty

Loc Code

LG002

276

66930

106

73393

118

74437

52

*12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries



# Picklist Print

January-24-12 3:57:31 PM

Work Order ID: 79320

**\*79320\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

250

Each

1,646.000

2

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

*M-L 12/03/20*

Location

Loc Qty

Loc Code

FP002

656

114859 ✓

656

ST331

990

110139

2

119017

988

*2*

D3415-041

Manufactured

No

250

Each

28.0000

1

1

**\*D3415-041\***

Nut Plate

\*\*

*M-L 12/03/20*

Location

Loc Qty

Loc Code

ST042

28

67605 ✓

28

*1*

CCR264SS3-3

Purchased

No

250

Each

881.0000

2

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

*M-L 12/03/20*

Location

Loc Qty

Loc Code

ST331

881

113973

2

117849 ✓

135

119017

744

*2*

ALS4-1032-130

Purchased

No

250

Each

1,250.000

78

78

**\*ALS4-1032-130\***

Insert

\*\*

*120181*

*M-L 12/03/20*

Location

Loc Qty

Loc Code

ST280

1155

119084

1155

ST281

95

119632

95

*78*

*\**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January-24-12 3:57:31 PM

Page 4

Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-15

Manufactured No

270 Each 22.0000 1 1

\*D3536-15\*

Gasket

80333

\*\*

M-L 12/03/20

Location

Loc Qty

Loc Code

FP002

22

73318

22

D3536-23

Manufactured No

270 Each 30.0000 1 1

\*D3536-23\*

Gasket

\*\*

M-L 12/03/20

Location

Loc Qty

Loc Code

FP002

30

43406

1

73312

17

74510

12

D3536-35

Manufactured No

270 Each 29.0000 1 1

\*D3536-35\*

Gasket

\*\*

M-L 12/03/20

Location

Loc Qty

Loc Code

FP002

29

73313

11

74511

18

D3536-39

Manufactured No

270 Each 24.0000 1 1

\*D3536-39\*

Gasket

\*\*

M-L 12/03/20

Location

Loc Qty

Loc Code

FP002

24

73317

24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

# Picklist Print

January-24-12 3:57:31 PM

Page 5

Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-15

Manufactured No

270

Each

20.0000

1

1

\*D3535-15\*

Wearshoe

\*\*

m-l 12/03/20

Location

Loc Qty

Loc Code

FP001

20

73315 ✓

8

74512 ✓

12

D3535-35

Manufactured No

270

Each

18.0000

1

1

\*D3535-35\*

Wearshoe

\*\*

80332

m-l 12/03/20

Location

Loc Qty

Loc Code

FP001

18

67598

1

70815

1

73311

4

74509

12

D3535-39

Manufactured No

270

Each

30.0000

1

1

\*D3535-39\*

Wearshoe

\*\*

m-l 12/03/20

Location

Loc Qty

Loc Code

FP001

30

69759 ✓

1

73316 ✓

17

74513

12

D3535-23

Manufactured No

270

Each

31.0000

1

1

\*D3535-23\*

Wearshoe

\*\*

m-l 12/03/20

Location

Loc Qty

Loc Code

FP001

31

73314 ✓

20

74508

11

January-24-12 3:57:32 PM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

January-24-12 3:57:32 PM

Page 6

Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-3 Manufactured No

270 Each

9.0000

1

1

\*D3537-3\*

Wearpad

74500

\*\*

1 m-l 12/03/20

Location

Loc Qty

Loc Code

FP002

9

76986

9

D3537-1 Manufactured No

270 Each

20.0000

9

9

\*D3537-1\*

Wearpad

80336

\*\*

9 m-l 12/03/20

Location

Loc Qty

Loc Code

FP002

20

69817

5

77036

15

AN960C10L NAS1149C0332 Purchased No

R

270 Each

0.0000

80

80

\*AN960C10I \*

washer

120648

\*\*

80 m-l 12/03/20

AN960C416 NAS1149C0463 Purchased No

R

270 Each

0.0000

1

1

\*AN960C416\*

washer

117735

\*\*

1 m-l 12/03/20

D3672-1 Manufactured No

270 Each

936.0000

2

2

\*D3672-1\*

Phenolic Washer

\*\*

m-l 12/03/20

Location

Loc Qty

Loc Code

FP001

300

66821 ✓

300

ST060

636

72229

136

76277

500

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



# Picklist Print

January-24-12 3:57:32 PM

Page 7

Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

2,799.000

80

80

\*AN3C4A\*

BOLT

121060

\*\*

80 m-12/03/20

Location

Loc Qty

Loc Code

ST350

2799

117313

2

117688

5

117872

10

118112

16

118451

2

118838

4

119749

760

120187

2000

AN4C5A

Purchased

No

270

Each

371.0000

1

1

\*AN4C5A\*

BOLT

\*\*

m-12/03/20

Location

Loc Qty

Loc Code

FP002

18

112243 ✓

18

ST355

353

112243

253

119017

100

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

January-24-12 3:57:32 PM

Page 8

Work Order ID: 79320

\*79320\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 02/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2646

Manufactured No

270

Each

94.0000

1

1

\*D2646\*

Aft Cap

79562

\*\*

1 m/l 12/03/20

## Location

## Loc Qty

## Loc Code

FP002

94

62678

5

68280

5

70945

1

71038

2

71070

2

73294

1

73825

78

D3413-1

Manufactured No

270

Each

93.0000

1

1

\*D3413-1\*

Ring

77940

\*\*

1 m/l 12/03/20

## Location

## Loc Qty

## Loc Code

ST420

4

66387

3

70773

1

ST464

89

75478

30

76754

59

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <b>CP</b>	DRAWN BY <b>PH</b>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <b>[Signature]</b>	APPROVED <b>[Signature]</b>	DRAWING NO. <b>D3274</b>	REV. D SHEET 1 OF 4
DATE <b>06.12.19</b>		TITLE <b>SKIDTUBE ASSEMBLY</b> SCALE NTS	
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

**RELEASED**07.02.12 **[Signature]****DEO ATTACHED**

SHOULDER

RETURN TO

ENGINEERING

UNCONTROLLED

SUBJECT TO

WITHIN

WORK

NO **39320****MLJ****12/01/24**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

**GENERAL NOTES:**

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

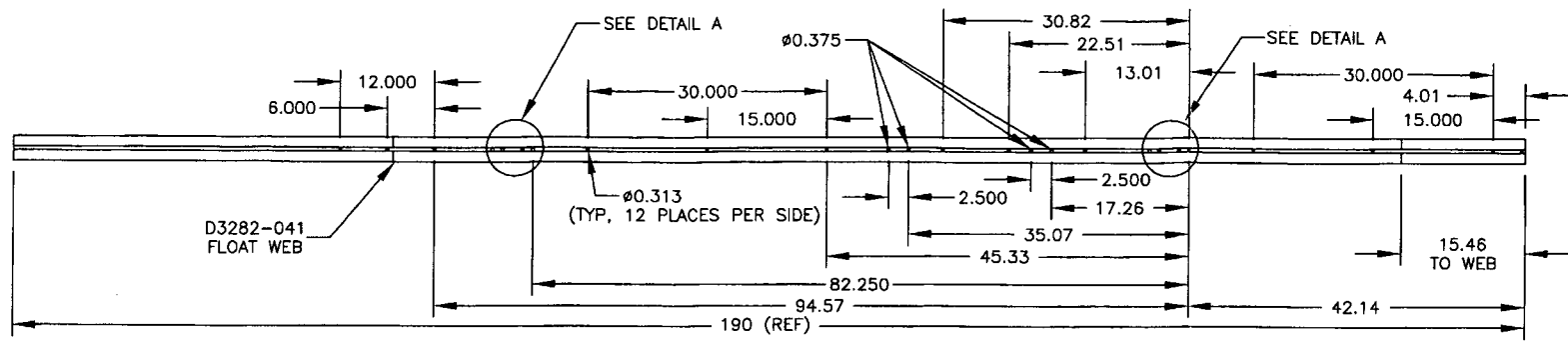
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

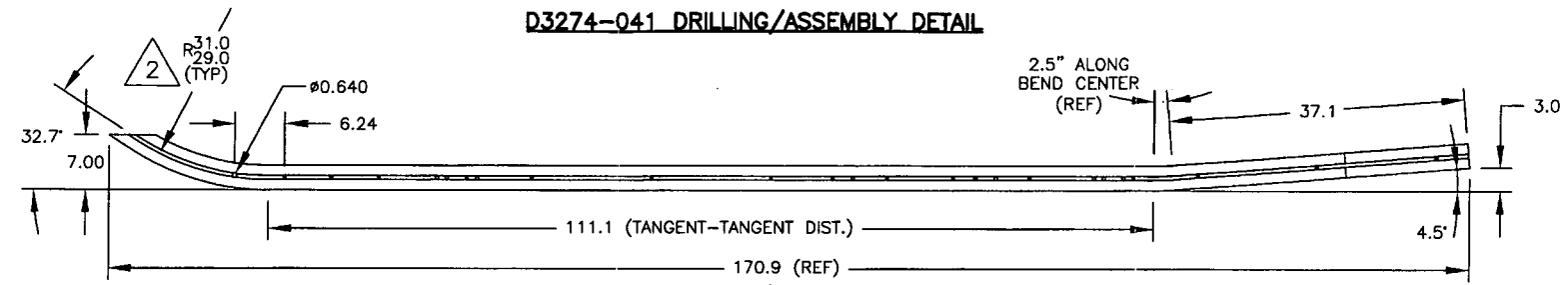
**NOTE:** Date & initial all entries

79320

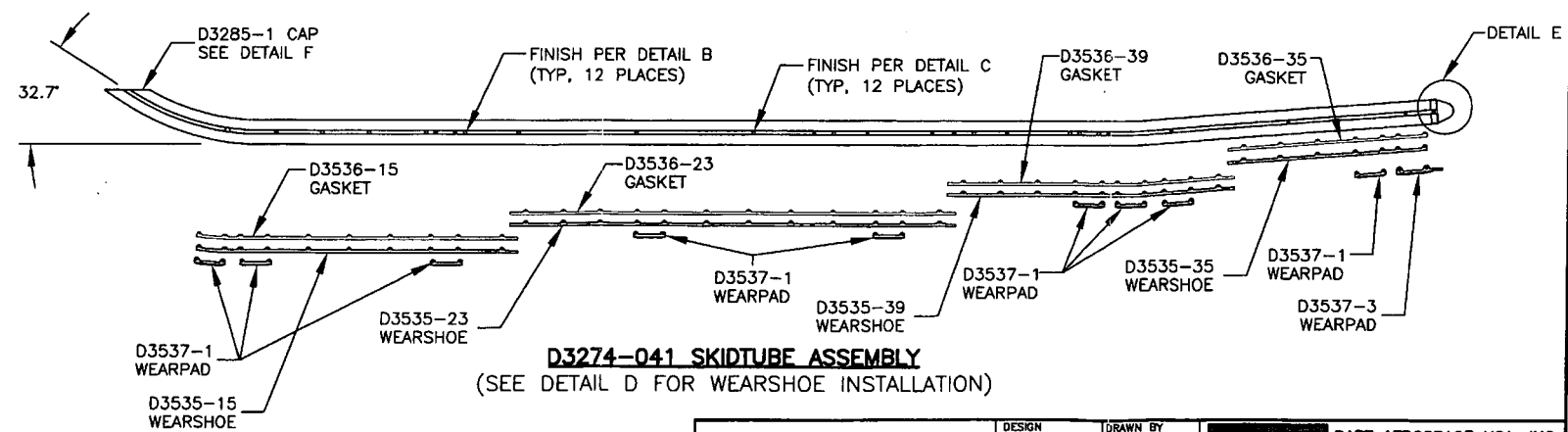
DEO ATTACHED



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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CHECKED	APPROVED	DRAWING NO.	REV. D		
DATE	06.12.19	D3274	SHEET 2 OF 4		
TITLE		SKIDTUBE ASSEMBLY		SCALE	
				1:15	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

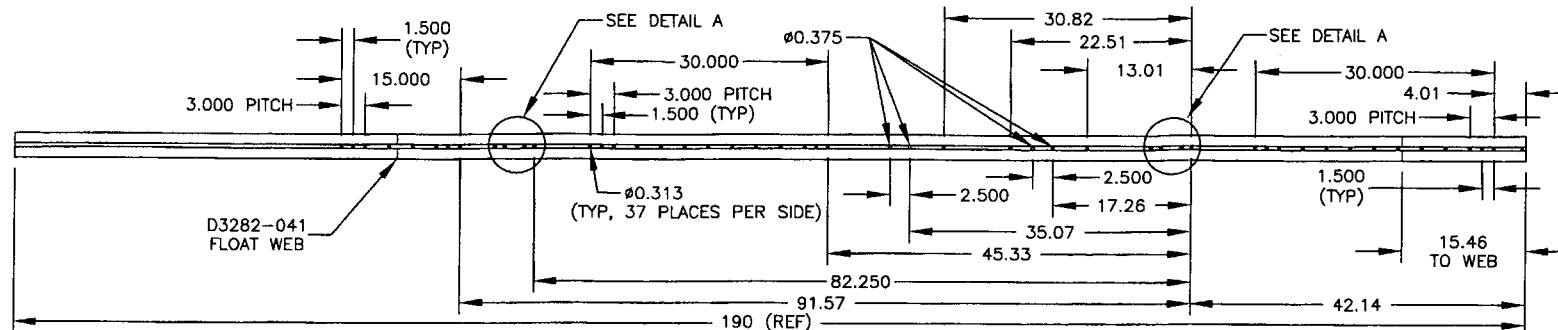
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

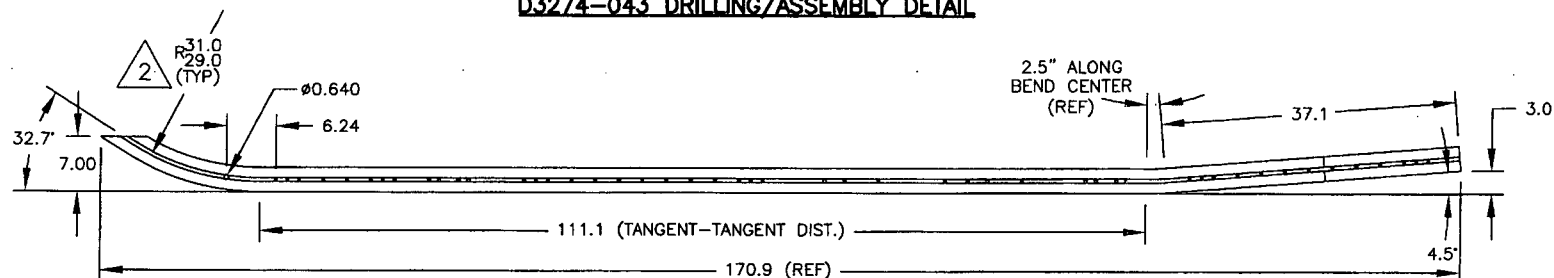


79320

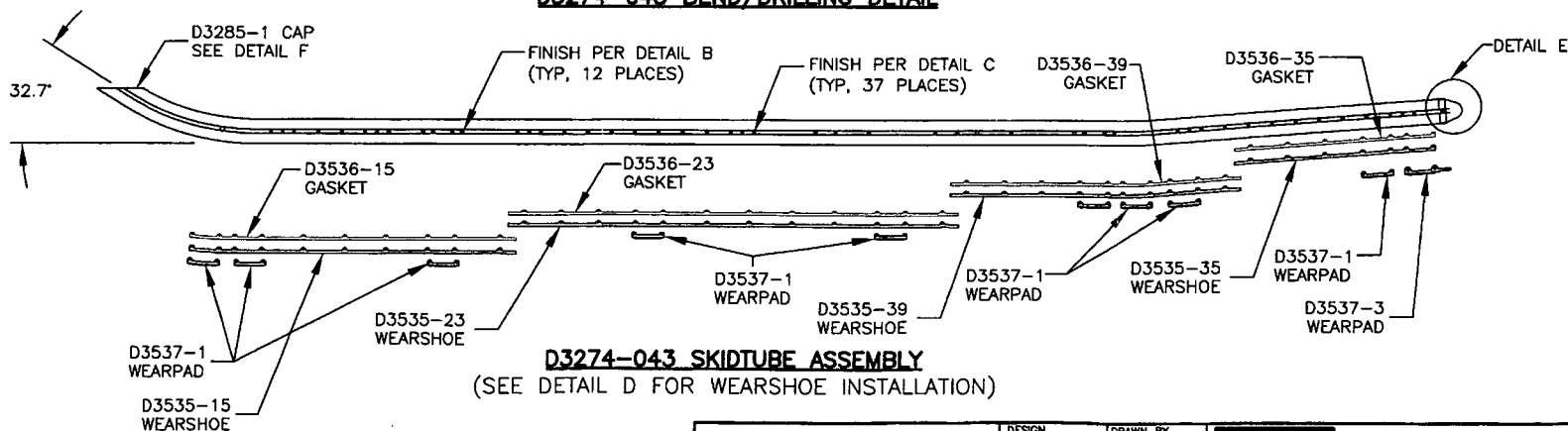
DEO ATTACHED



**D3274-043 DRILLING/ASSEMBLY DETAIL**



**D3274-043 BEND/DRILLING DETAIL**



**D3274-043 SKIDTUBE ASSEMBLY**

(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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DESIGN	CP	DRAWN BY	PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. D
CHECKED	H	APPROVED	H	DRAWING NO. D3274	SHEET 3 OF 4
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	SCALE	1:15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

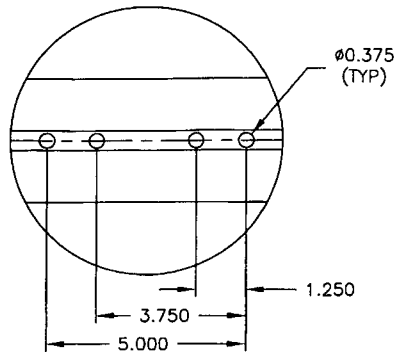
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

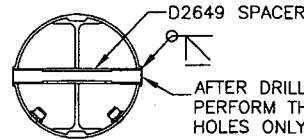
**NOTE:** Date & initial all entries

79320

# **DETAIL A: DRILL DETAIL**

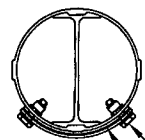
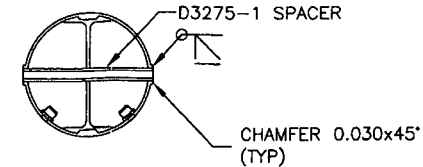


## **DETAIL B** FOR 0.375 HOLES ONLY



- AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR 0.375  
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. C'BORE TO 0.313x0.75 DEEP

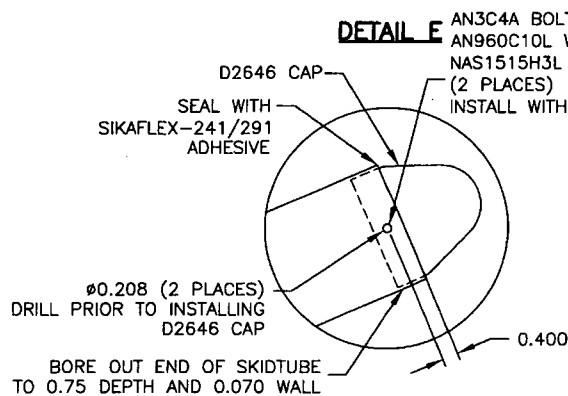
## **DETAIL C** FOR 0.313 HOLES ONLY



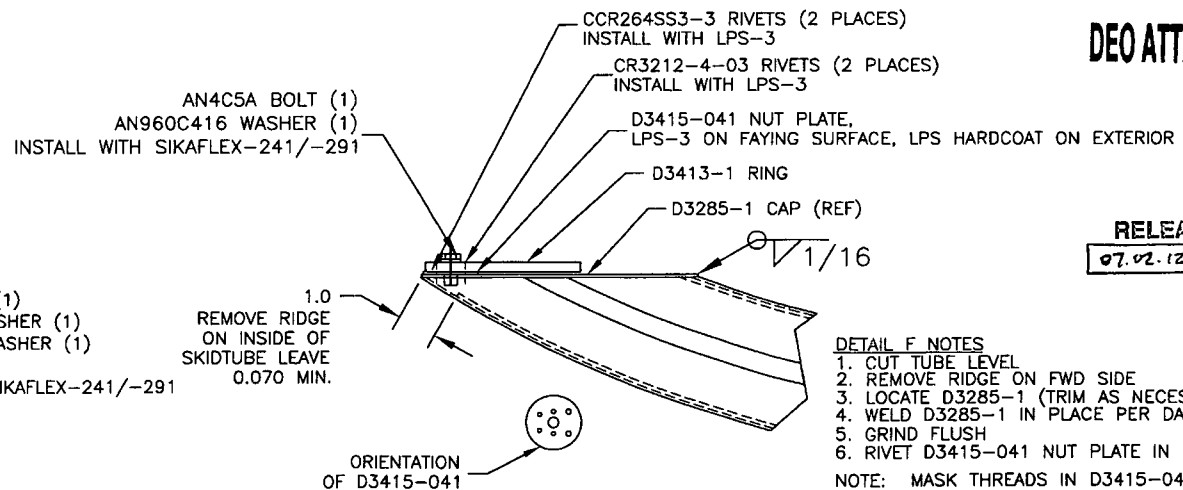
## **DETAIL D**

- ALS7-1032-130 INSERT (1)  
AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(78 PLACES)  
GASKET/WEARSHOE/WEARPAD (REF)

## **DETAIL E**



## **DETAIL F: END FINISHING DETAIL**



DEO ATTACHED

RELEASED  
07.02.12

- DETAIL F NOTES**
1. CUT TUBE LEVEL
  2. REMOVE RIDGE ON FWD SIDE
  3. LOCATE D3285-1 (TRIM AS NECESSARY)
  4. WELD D3285-1 IN PLACE PER DART QSI 004
  5. GRIND FLUSH
  6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

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		CP	PH	PORT HADLOCK, WA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED	APPROVED	DRAWING NO.	REV. D
		#	#	D3274	SHEET 4 OF 4
		DATE		TITLE	SCALE
		06.12.19		SKIDTUBE ASSEMBLY	1:3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

79320

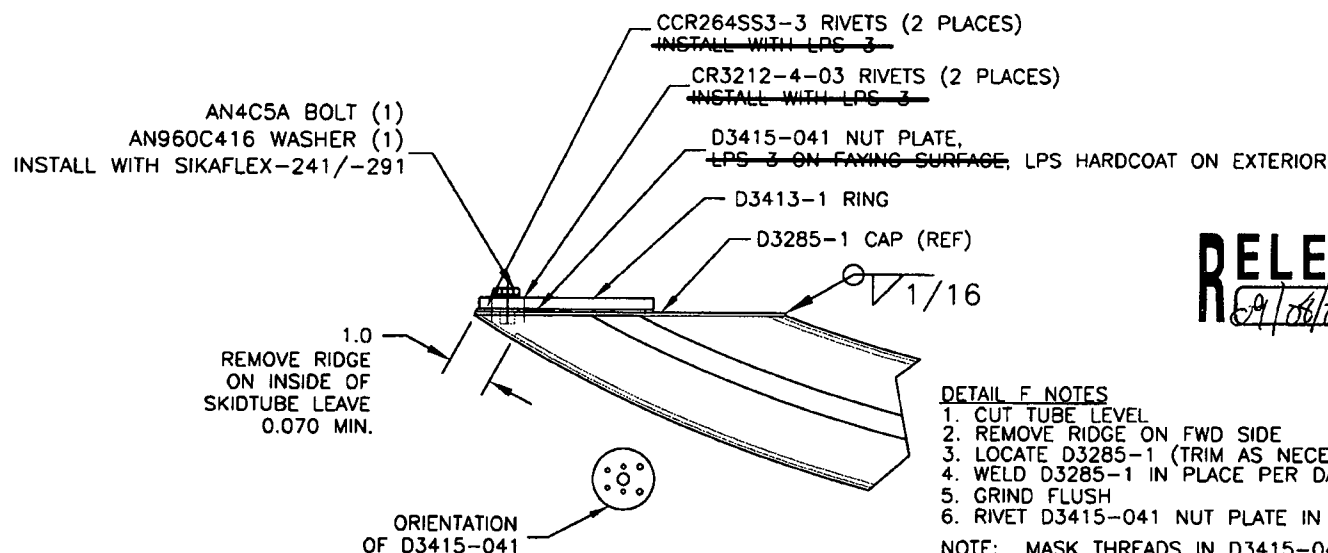
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	<b>DART AEROSPACE USA, INC ENGINEERING ORDER</b>	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DE APPR. <i>[Signature]</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23	

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

NO. 285

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 79322  
Part number: A206-642-541  
Description: Skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier David Hunt Date of Test Coupon 12.03.14  
Welder Barclay Elliott Date of Test Coupon 12.03.14

The above named individual is qualified in accordance with AWS D17.1.2001 to weld